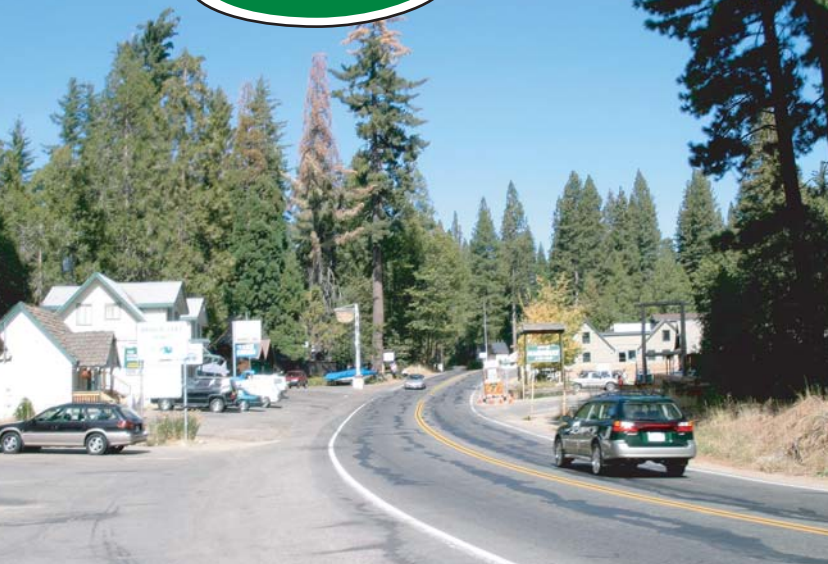


STATE ROUTE



Transportation Concept Report

Office of System Planning · District 6 · October 2005



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Cover Photos:
Top Left - Route 168 in Shaver Lake
(Segment 10)

Top Right - Route 168 near McKinley Ave.
(Segment 1)

Bottom - Route 168 near Armstrong Ave.
(Segment 3)

STATE ROUTE



District 6

Transportation Concept Report

Office of System Planning

October 2005



Approval Recommended:

A handwritten signature in blue ink, appearing to read "D. Alan McCuen".

D. Alan McCuen
Deputy District Director
Planning Division

10/28/05
Date

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J. Mike Leonardo
District Director

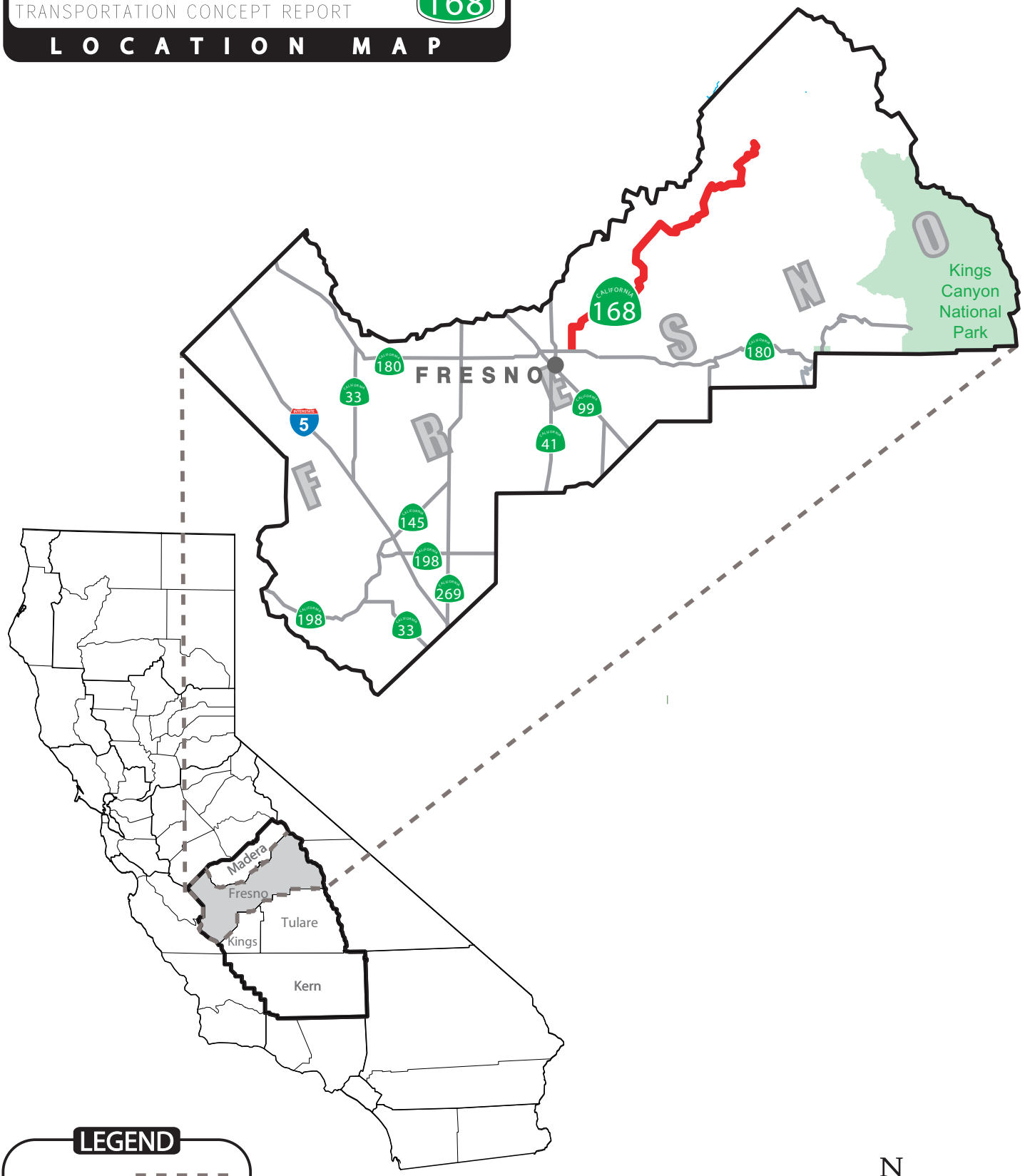
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Date

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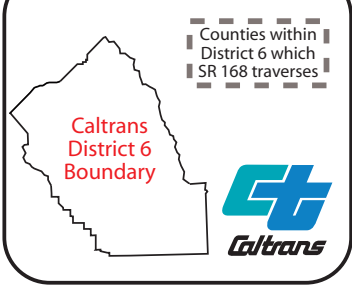
STATE ROUTE

TRANSPORTATION CONCEPT REPORT

LOCATION MAP



LEGEND



Not To Scale

Transportation Concept Report

State Route 168

October 2005

I. INTRODUCTION

This Transportation Concept Report (TCR) is a long-range system-planning document that establishes a planning concept for a state highway corridor through the year 2030. The TCR provides the route, traffic data, and operating characteristics for the current - 2005 and future years - 2015 and 2030 for Caltrans District 6 State highway corridors.

Considering reasonable financial and physical constraints, the TCR defines the appropriate Route Concept Level of Service (LOS) and facility type(s) for each route. It also broadly identifies the nature and extent of improvements needed to attain the Route Concept LOS.

For the purpose of this document, capacity-enhancing improvements such as lane additions are the primary focus for LOS attainment. Other route improvements, including a new alignment that will help to maintain facility continuity, are discussed as long-term measures.

Caltrans endeavors to maintain a target LOS at the transition between LOS of C and D on State highway facilities, or whichever LOS is feasible to attain. The Concept LOS is a "target" LOS determined by the importance of the route and environmental factors. A deficiency or a need for improvement is triggered when the actual LOS falls below the Concept LOS.

This TCR also identifies existing mass transit and the deployment of Intelligent Transportation Systems (ITS) as integral to route corridor development.

The Ultimate Transportation Corridor (UTC), as identified in this TCR, ensures that adequate right-of-way (ROW) is preserved for ultimate facility projects beyond 2030. The UTC does not consider funding as a constraint. The System Planning unit should be consulted for the interim right-of-way (prior to ultimate

construction) at a specific location along the corridor.

This document identifies the initial and conceptual planning phase that leads to subsequent programming and the project development process. Consequently, the specific nature of proposed improvements, such as roadway width, number of lanes, and access control may change in later project development stages.

Final determinations are normally made during the project report and design phases. Therefore, this TCR is a "living document," subject to amendments as conditions change and projects are completed. Caltrans District 6 System planning staff will update the TCR on a three-to-five year cycle or as needed.

This TCR for State Route (SR) 168 was prepared and completed by the Caltrans District 6 System Planning unit in cooperation with local and regional agencies and other Caltrans functional units. As such, it will serve as a guide in cooperative planning and implementation of transportation and land use decisions.

II. ROUTE DESCRIPTION AND PURPOSE

Begins: From Route 180 in Fresno.

Ends: At the Nevada State Line.

Length: Route 168 is a 124-mile highway located in northeast Fresno County and north Inyo County.

Route 168 begins at Route 180 in Fresno and extends to Huntington Lake, ending at 0.1 mile east of the road to Florence Lake (District 6 portion). It then continues in District 9 from Lake Sabrina in Inyo County

to the Nevada State Line. The portion between Huntington Lake and Lake Sabrina is not part of the legislative route and is unconstructed. Moreover, this area is currently within three wilderness (i.e. roadless) areas; therefore any future highway construction of these segments is very unlikely.

This TCR covers the portion of the route west of the Sierras located in District 6. At the beginning of this TCR is a map showing the location of Route 168 within District 6 (Location Map, page "i"). With the completion of the Sierra Freeway construction project, Route 168 now includes 12-miles of freeway. Route 168 has been constructed as a 6-lane freeway from its beginning at Route 180 to Herndon Avenue, and as a 4-lane freeway from Herndon Avenue east to Temperance Avenue and the Temperance Avenue interchange. The Route then transitions into a 4-lane expressway to Shepherd Avenue where it becomes a two lane road all the way to Huntington Lake.

This route serves as a major commuter route for the Fresno-Clovis Metropolitan Area (FCMA) and for recreational purposes from the FCMA to Shaver Lake, Huntington Lake, Sierra Summit ski resort, and the Sierra National Forest. Route 168 also serves the foothill communities of Academy, Prather and Auberry.

Land Use: In the FCMA, Route 168 services the commercial developments at several interchanges. It provides access to major trip attractions including California State University-Fresno (CSUF), the CSUF Save Mart Center, auto retail sales, and community shopping centers.



The CSUF Save Mart Center is a major sports and recreation complex at the Route 168 / Shaw Ave. interchange.

Between Herndon and Shepherd Avenues, large residential developments cluster along this corridor as it provides access to parts of northeast Fresno and the Clovis area.

It also provides access to the Shaver/Huntington Lake recreation areas and the increasingly growing foothill/mountain residential developments. As

Route 168 continues northeast, out of the Clovis area and into the Sierra National Forest, it becomes more rural in nature.

Terrain: Generally flat in the FCMA, the terrain changes to rolling and mountainous as it traverses the foothills and the Sierra National Forest.

A. Modal Alternatives

Amtrak: Neither Amtrak, nor any other railroad, provides rail services along any portion of Route 168.

However, there are currently six Amtrak passenger rail trains that traverse District 6 on a daily basis on the San Joaquin Route, with connections in Bakersfield, Wasco, Corcoran, Hanford, Fresno, and Madera.

Transit Services: With the exception of Auberry Transit, no fixed-route transit services are provided along any portion of Route 168. Within the FCMA numerous transit routes cross under or over SR 168, but none include this roadway as a portion of their routes. Auberry Transit, as a part of the Fresno County Rural Transit Agency (FCRTA), operates a weekday only demand-responsive service (also known as Dial-A-Ride service) within the Auberry/Prather rural area and a once-a-week (Tuesday) service between Auberry/Prather and the Fresno/Clovis metropolitan areas. Route 168 is used as needed for these services.

For a more detailed description of transit facilities along this route please see the Appendix.

Bicycle Facilities/Routes: From its beginning at Route 180 in central Fresno to its terminus east of Huntington Lake (PM R0.00 - PM 65.9) Route 168 is composed of freeway, expressway and conventional roadway sections. Within its length, a bicycle rider would find sections of roadway that are both opened or closed to bicycle travel.

Where open, typically outside of the FCMA, riders will frequently encounter heavy traffic (including numerous logging trucks), a narrow winding roadway with moderate to steep grades, and the frequent absence of bikeable shoulders.

From east of Clovis to the terminus east of Huntington Lake, Route 168 is listed as a “proposed bike route” within both the Fresno County’s General Plan and Fresno County’s Bicycle Plan.

Such a designation will, in the future, dictate that improvements be made to the roadway by Caltrans to address bike route improvement needs.

For a more detailed description of bike facilities along this route, please see the Appendix.

B. Intelligent Transportation Systems (ITS)

Route 168 has several Closed Circuit TVs (CCTV), and Changeable Message Signs (CMS). There is one operating Highway Advisory Radio (HAR) near Lodge Road (PM 27.36). Another application of ITS along this corridor is the planned deployment of a Weather Station (WS) at the Shaver Lake Maintenance Station. Additional planned ITS items include Traffic Monitoring Stations, CCTVs, and CMSs along this corridor. Non-recurring congestion and delays are attributed to unforeseen incidents such as traffic accidents, stalled vehicles, or special events. ITS is designed to identify these non-recurring incidents, and to remove them from the freeway as quickly and efficiently as possible. ITS also provides benefits for safety, ramp metering, and automated warning systems.



The Caltrans Central Valley Transportation Management Center (TMC) monitors specific traffic

locations from its headquarters at the District Office in Fresno. Specific segment-by-segment information is in the ITS chart in the Appendix.

C. State Route 168 Highway Facts

- Route 168 is in the California Freeway and Expressway System and in the Federal Surface Transportation Program System (STP).

- Functionally classified as Urban Principal Arterial within the Fresno-Clovis Metropolitan Area (FCMA) and as a Minor Arterial in the rural area.
- Route 168 serves the Fresno-Clovis Metropolitan Area as a commuter route. It's one of the high volume freeway/expressways in the region, with Annual Average Daily Traffic (AADT) up to 65,000.
- It serves recreational travel to the Sierras Nevada Mountains. Traffic is typically higher on weekends, holidays and in the summer months for the rural segments. Seasonal activities, such as skiing and hunting, also attract heavy traffic for short periods.
- Route 168 is the primary access route for the permanent residents of the foothill and mountain communities including Prather, Auberry, Pine Ridge, Tollhouse, Burrough Valley, Shaver Lake area, Huntington Lake, and Lakeshore.
- In the Sierra National Forest, Route 168 is also designated as Forest Highway #48 north of Dinkey Creek Road.
- Route 168 is listed as a Terminal Access Route for larger trucks under STAA from Route 180 to Big Dry Creek. Other segments are on the Truck Network for California Extra Legal Truck Routes, or as Advisory Routes.
- There are several proposed segments of the Route 168 highway on new alignments that have been adopted from Shepherd Avenue to Huntington Lake. These adoptions have occurred from 1955-1973. The route adoption segments, with dates, are shown in the Appendix. The segment between Lodge Road and the Auberry/Tollhouse Road junction was completed as a 4-lane expressway in 1970.
- There are several freeways and controlled access highway agreements for Route 168. They range in date from 1962 to 1998 and are listed in the Appendix.

D. Specific Environmental Considerations

Specific sensitive biological species include, but are not limited to, the following flora and fauna:

Flora – Oak woodlands, conifers, wetland, and riparian resources.

Fauna – Potential fairy shrimp and nesting birds issues, California tiger salamander habitat, and vernal pools.

III. Segment Map

Attached on the next page is the 11" x 17" foldout TCR Segment Map for Route 168. This map shows the 11 segments of Route 168 in Fresno County.

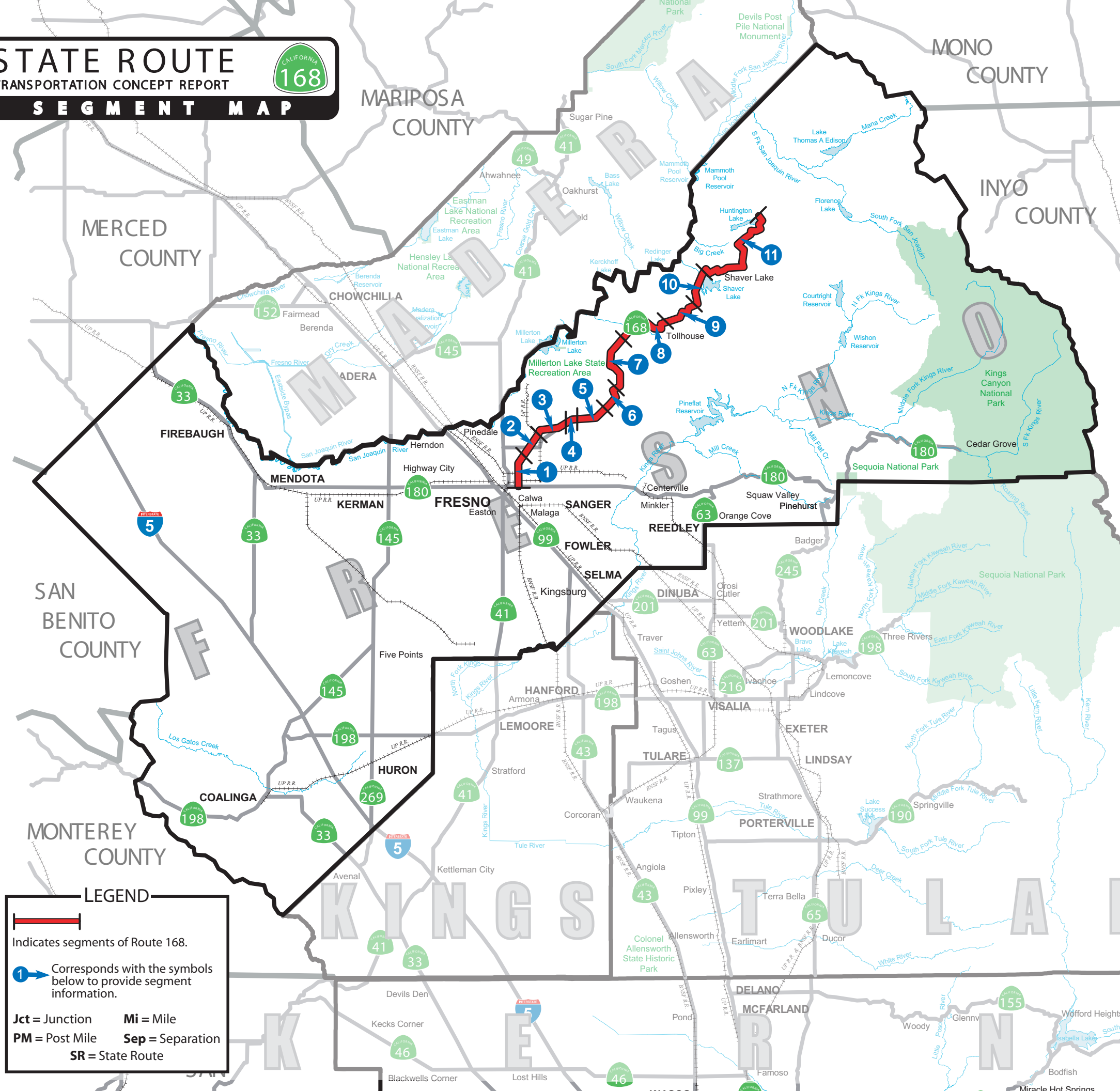
Following the Segment Map is an overview of Route 168 geometrics (including detail segment maps), land use and environmental considerations. The overview is split into several segment groups. See the attached 2-page 11 x 17" fold-out Summary Chart in Section VI for additional information in table form.

Please see the following page for the Route 168 Segment Map.

STATE ROUTE 168

TRANSPORTATION CONCEPT REPORT

SEGMENT MAP



FRESNO COUNTY

- 1 **Segment 1:** SR 168 PM R0.0 / R4.3
Route 180 / Shaw Ave
- 2 **Segment 2:** SR 168 PM R4.3 / R6.9
Shaw Ave / Herndon Ave
- 3 **Segment 3:** SR 168 PM R6.9 / R9.2
Herndon Ave / Temperance Ave
- 4 **Segment 4:** SR 168 PM R9.2 / R11.8
Temperance Ave / Shepherd Ave
- 5 **Segment 5:** SR 168 PM R11.8 / 18.6
Shepherd Ave / Sample Rd
- 6 **Segment 6:** SR 168 PM 18.6 / T22.8
Sample Rd / Millerton Rd
- 7 **Segment 7:** SR 168 PM T22.8 / T32.87
Millerton Rd / Lodge Rd
- 8 **Segment 8:** SR 168 PM L27.36 / R36.2
Lodge Rd / Auberry-Tollhouse Rd Jct
- 9 **Segment 9:** SR 168 PM R36.2 / 45.0
Auberry-Tollhouse Rd Jct / Dinkey Creek Rd
- 10 **Segment 10:** SR 168 PM 45.0 / 49.7
Dinkey Creek Rd / Huntington Lake Rd
- 11 **Segment 11:** SR 168 PM 49.7 / 65.9
Huntington Lake Rd / 0.1 Mi East of Rd to Florence Lake

LEGEND



Indicates segments of Route 168.

1 Corresponds with the symbols below to provide segment information.

Jct = Junction Mi = Mile
PM = Post Mile Sep = Separation
SR = State Route

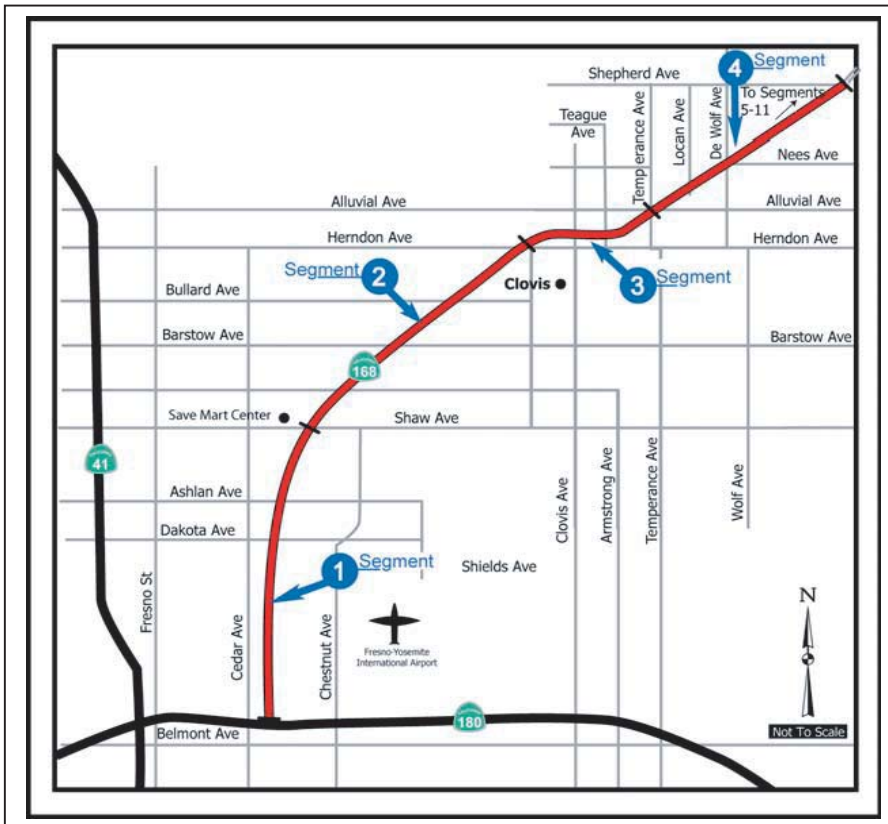
IV. Geometrics, Land Use, and Environmental Considerations

Segments 1-4: Route 180 to Shepherd Avenue

Begins: At Route 180

Ends: At Shepherd Avenue

Land Use: These segments of Route 168 are generally within the urbanized Fresno-Clovis Metropolitan Area, although the area surrounding the highway northeast of Temperance Avenue is still predominantly rural in nature. The area westerly of the highway is slowly being converted from agriculture to more urban land uses.



Developments along these segments include California State University Fresno (CSUF), auto retail sales, a major regional medical center, financial institutions, and the CSUF Save Mart Center arena. There are also numerous clusters of residential developments along these segments.

Facility: The existing facility is a 6-lane freeway between Route 180 and Herndon Avenue, and a 4-lane freeway or expressway from there to Shepherd Avenue. The median has sufficient width to add mixed-flow lanes (automobiles, trucks, buses and motorcycles sharing traffic lanes) or light rail (mass transit) in the future.

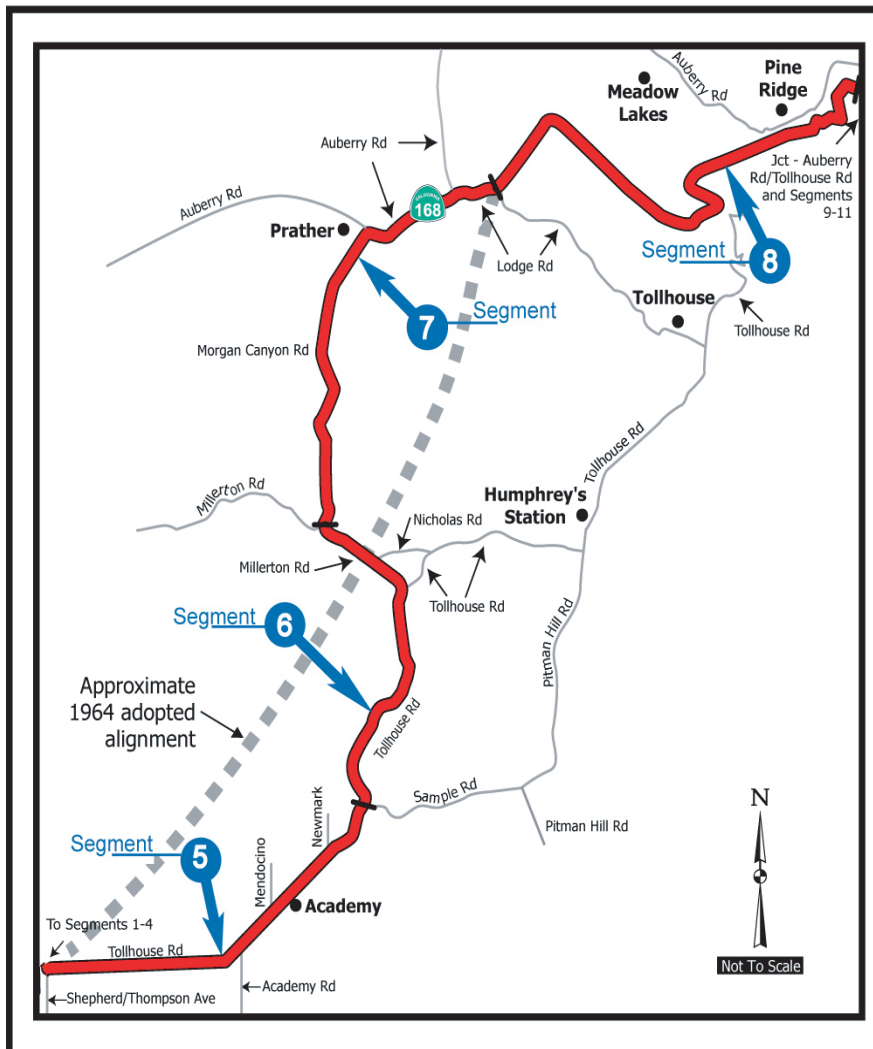
Environmental/Historical Resources: Nesting bird, fairy shrimp and California tiger salamander habitats potentially exist within these four segments. Additionally, within these four sections, one property is currently listed on the National Register of Historic Places.

Interchanges: Route 168 begins with a freeway-to-freeway interchange connection with Route 180. Other interchanges are at McKinley, Shields, Ashlan, Shaw, Bullard, Herndon, Fowler, and Temperance Avenues. There are also proposed freeway interchanges at Nees and Shepherd Avenues. Additional access is at the signalized intersection at Tollhouse Road, near Nees and Shepherd Avenues. Pedestrian overcrossings are at Princeton and Weldon Avenues. A park-and-ride lot facility is proposed at the Temperance Avenue / Route 168 interchange.

Segments 5-8: Shepherd Avenue to Auberry/Tollhouse Road Junction

Begins: At Shepherd Avenue

Ends: Auberry/Tollhouse Road Junction

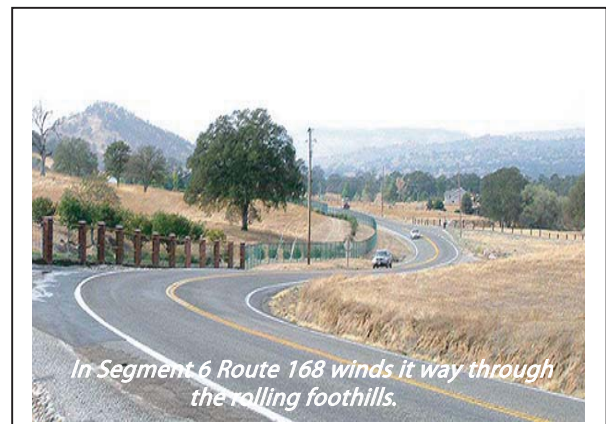
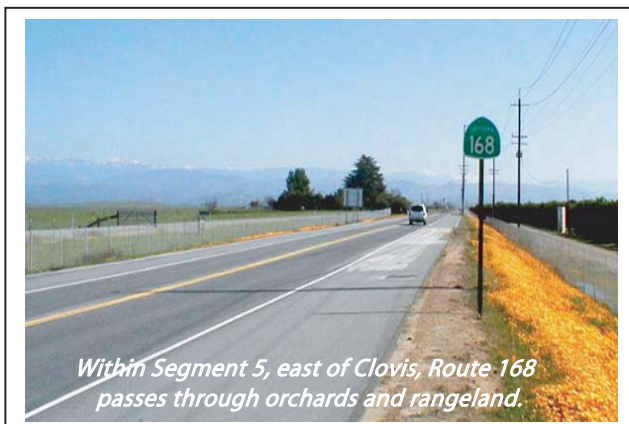


Land Use: These segments begin on the valley floor and traverse the Sierra Nevada foothills and Sierra National Forest. Land uses are predominantly agriculture, grazing, and rural residential. The foothill communities of Prather and Auberry are located along these segments.

These residential communities are projected to grow, and increasingly will contribute to traffic congestion along Route 168 in the rural areas. Caltrans owns much of the right-of-way along a new alignment between Sample and Lodge Roads. There is an adopted alignment for the

entire length but the precise alignment has not been established. Caltrans currently has no plans to construct this adopted alignment (See Segment Map – Segments 5-8 above).

Facility: Segments 5-7, from Shepherd Avenue to Lodge Road, are comprised of a 2-lane rural conventional highway in a mix of rolling and mountainous terrain. The route concept for this segment is a 4-lane expressway facility on a new alignment with 4-lane freeway right-of-way.





In Segment 8 Route 168 enters the mountains with a 4-Lane segment west of Shaver Lake.

Segment 8, from Lodge Road to near Auberry-Tollhouse Road Junction, is comprised of a 4-lane expressway located entirely in mountainous terrain. No specific future improvements are identified for this segment within the 2030-planning horizon.

Environmental/Historical Resources:

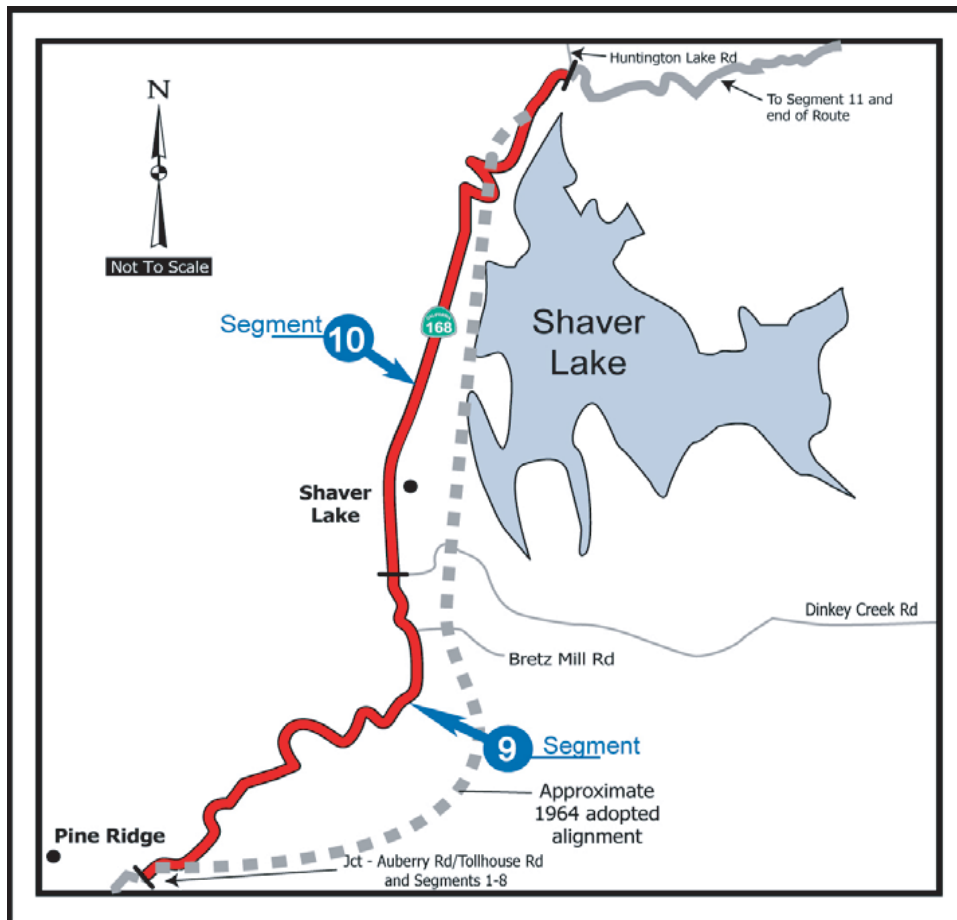
Potential environmental issues may include the habitat of fairy shrimp, the California tiger salamander and nesting

birds, wetlands, oak woodlands riparian habitat, and numerous stream crossings. Cultural resources, both prehistoric and architectural, occur in various areas along SR 168 in District 6. An EIS/EIR (partially completed as of August 2005) will identify archeological and biological issues within these four segments.

Segment 9-10: Auberry/Tollhouse Road Junction to Huntington Lake Road

Begins: Auberry/Tollhouse Road Junction

Ends: At Huntington Lake Road



Land Use: The predominant land uses are rural residential and Sierra National Forest. The community of Shaver Lake is located within this segment.

There is also the planned mountain urban development south and west of Shaver Lake as documented in specific plan areas of Shaver Lake Forest, Bretz Mountain Village/Ockenden Ranch, and Wildflower Village.

Facility: Segments 9-10 are comprised of a 2-lane conventional highway located entirely in mountainous terrain. Although there is an adopted alignment for these segments, no specific future improvements are identified within the 2030-planning horizon.

The County of Fresno has been acquiring right-of-way for a 2-lane highway through dedication on a portion of the adopted new alignment since the 1970's. The intent was to serve the mountain urban development in the Shaver Lake area. Caltrans has no plans to construct this alignment in the foreseeable future. (The adopted alignments are shown on the Segment Map 9 -10 - see previous page - and are for information purposes only.)



Within the eastern portions of Segment 10 Route 168 follows the shoreline of Shaver Lake.

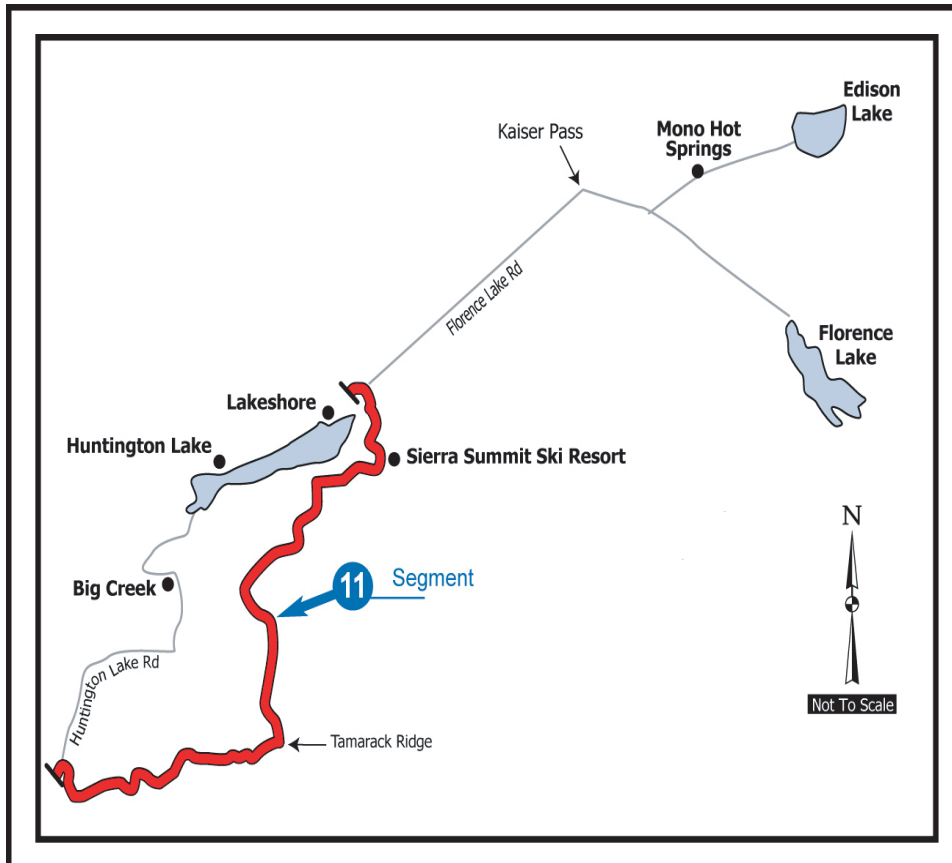
Environmental/Historical Resources: Environmental resources include coniferous forests, lakes, meadows, and wetlands. Spotted owls may also exist in this area. Cultural

resources, both prehistoric and architectural, occur, or may occur, in various areas and locations along Route 168 in District 6.

Segment 11: Huntington Lake Road to End of Route in District 6

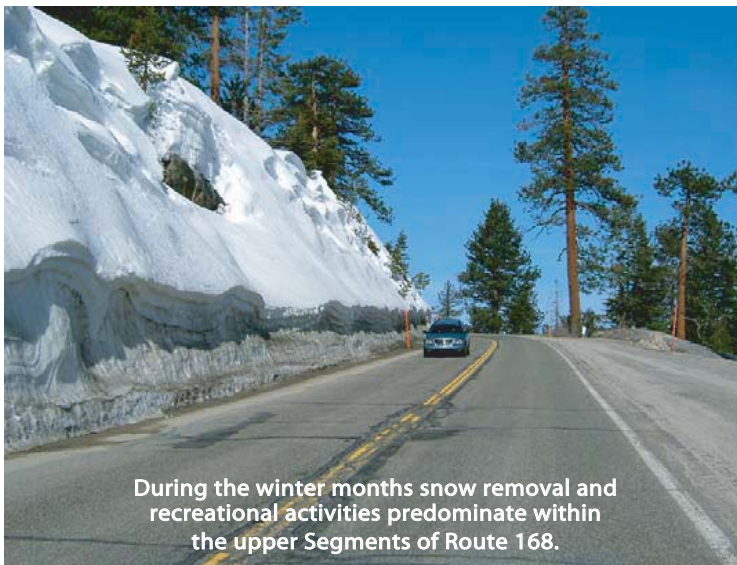
Begins: At Huntington Lake Road

Ends: At 0.1 mile E of Road to Florence Lake



Land Use: Land uses consist of forest land, recreational activities, and mountain urban residential at Huntington Lake. The Sierra Summit Ski Resort is also located within this segment.

Facility: Segment 11 is totally comprised of a 2-lane conventional highway and lies entirely in mountainous terrain. A large portion of this segment is located within the Sierra National Forest.



During the winter months snow removal and recreational activities predominate within the upper Segments of Route 168.

No future improvements are identified in this segment within the 2030 planning horizon.

Environmental/Historical Resources:

Environmental resources include coniferous forests, lakes, meadows, and wetlands. Spotted owls may also exist in this area.

Potential environmental issues may exist in this area but are currently unknown because no recent project has triggered the need for environmental studies.

V. Concept Rationale

Route Concept LOS:

Urban: Segments 1- 4 are within the urban/suburban portion of Route 168. LOS D is assigned to these segments due to the combination of high traffic volumes, typical urban characteristics, and consideration that this level of service is cost effective for the urban travel environment.



A Concept LOS D is anticipated for Segments 5-11 through 2030 due to the area's mountainous terrain and the highway's curvilinear alignment

Rural: Route 168 is a major recreational route providing access to the Sierra Nevada Mountains.

The Concept Level of Service (LOS) for the 2030-planning horizon for rural segments of Route 168 is D since this is the best LOS that can be attained due to the area's mountainous terrain and the highway's curvilinear alignment.

Concept Facility:

Within the Fresno-Clovis Metropolitan Area (FCMA) i.e. Segments 1-4, the concept is a 6-lane freeway, with ramp metering as an option from the Route 180 interchange to McKinley Avenue; an 8-lane freeway from McKinley Avenue to Shaw Avenue, a 6-lane freeway from Shaw Avenue to

Herndon Avenue, a 4-lane freeway from Herndon Avenue through the Temperance Avenue interchange, and a 4-lane expressway to Shepherd Avenue.

Additionally, within these segments sufficient median width exists which will allow for the construction of either mixed-flow lanes or light rail (mass transit) in the future.

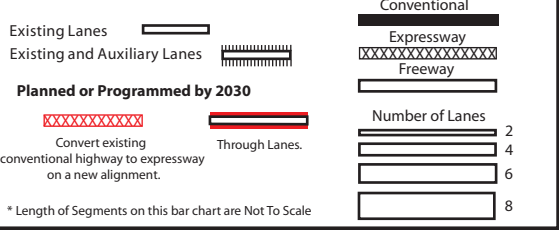
The Concept Facility objectives for the rural portion of Route 168 (Segments 5-11) are: a 4-lane expressway on a new 4-lane freeway ROW from Shepherd Avenue to Lodge Road; a 4-lane controlled access highway from Lodge Road to the Auberry/Tollhouse Road Junction, and a 2-lane conventional highway with passing lanes or other operational improvements, where feasible, from the Auberry/Tollhouse Road Junction to the end of the route in District 6 (near Huntington Lake).

VI. State Route 168 Transportation Concept Report Summary Chart

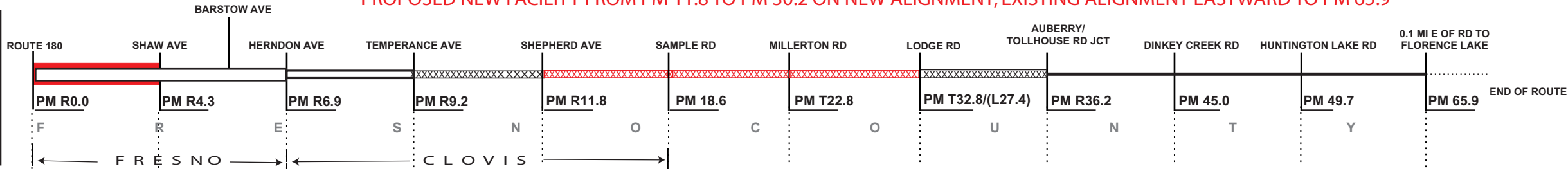
The two-page Summary Chart on the following pages indicate that Route 168 is divided into 11 different segments. The Chart further provides descriptive and technical information, both current and forecast, for the State highway. It also has a linear geographic diagram that shows the major State and local highway facilities, along with key natural features and City/County boundaries, current highway geometrics, i.e., conventional highway, expressway, and freeway. A "Chart Explanation" bar defines what is shown on the Chart with the exception of self-explanatory technical information. The Summary Chart also delineates the functional classification, various highway designations, environmental information, and General Plan information.

Please see the following two pages for the Route 168 Summary Charts.

LEGEND



PROPOSED NEW FACILITY FROM PM 11.8 TO PM 30.2 ON NEW ALIGNMENT;EXISTING ALIGNMENT EASTWARD TO PM 65.9



Segment: Is self-explanatory except for several data sets:

Rural/Urban: Indicates whether the segment is in a rural area or city limits.

Terrain: Shows the general highway grade: minimal grade = level; moderate grade = rolling;and severe grade = mountainous.

ROW: Portrays Right-of-Way (ROW) and geometric data in feet and meters.

Shoulder Range: Is a range of treated surface (8' standard), both inside and outside shoulders.

Ultimate (UTC): Is the typical ROW needed for the ultimate facility, i.e., 8 lane freeway (8F) 218' is the standard typical UTC ROW - will be updated upon corridor plan lining by specific sections of highway.

Facility: Shows the Existing Facility, the desired facility type (2030 Concept) by 2030-RTPA's and Caltrans, and the Ultimate Facility to preserve ROW and plan line beyond 2030. It also shows whether a passing lane exists. 2C(I) indicates that the highway has been improved in select locations with operational or safety improvements. Examples are: passing lanes, channelization and traffic signals.

LOS: The current (2005) LOS (level of service), along with the expected calculated LOS in 2015 and 2030.The 2030 Concept is the target LOS desired, i.e., LOS C, for attainment by 2030 Caltrans.

Deficiency: Occurs when the target LOS is degraded, i.e., LOS D worse than LOS C, with the year of occurrence shown. It also shows whether a capacity improving project is in the STIP, and what the LOS would be with the 2030 Concept improvement.

Directional Split: Denotes the split in peak hour traffic flow on a directional basis (NB/SB or WB/EB) either in the morning (AM) or evening (PM).

AADT: Signifies Annual Average Daily Traffic.

Peak Hour: Indicates a representation of the maximum hour of traffic flow during the day.

% Trucks: Shows the percent of trucks for AADT and Peak Hour.

^ Concept Facility meets Concept LOS.

* The Ultimate ROW is generally the same as the existing ROW.

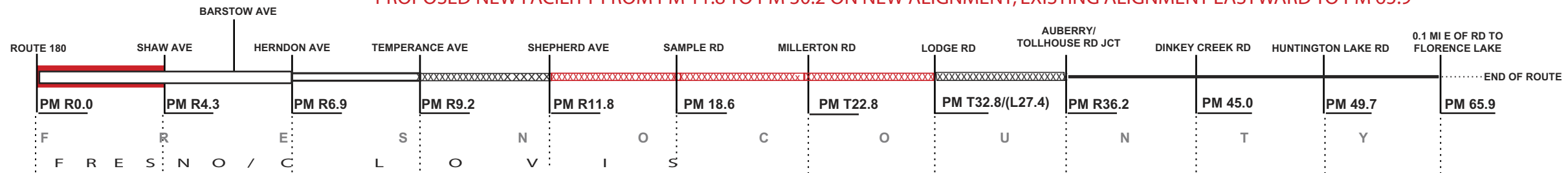
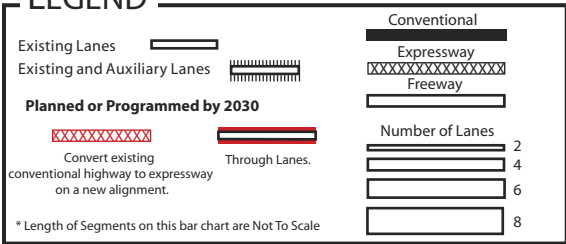
** 2-lane conventional improvements, i.e., turn lanes, signals, passing lanes, etc.

*** Widen the connector ramps from 2 to 3 lanes in each direction from RTE 180 to McKinley Ave. Facility concept will remain 6F. Operational improvements will keep LOS at the cusp of LOS E/F.

**** On a new alignment.

SEGMENT	1	2	3	4	5	6	7	8	9	10	11
County / Route	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168	FRE / 168
Description Begin	ROUTE 180	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	SAMPLE RD	MILLERTON RD	LODGE RD	AUBERRY- TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD
Description End	SHAW AVE	HERNDON AVE	TEMPERANCE AVE	SHEPHERD AVE	SAMPLE RD	MILLERTON RD	LODGE RD	AUBERRY- TOLLHOUSE RD JCT	DINKEY CREEK RD	HUNTINGTON LAKE RD	0.1 MI E OF RD TO FLORENCE LAKE
Postmile Limits Begin/End	R 0.0 / R 4.3	R 4.3 / R 6.9	R 6.9 / R 9.2	R 9.2 / R 11.8	R 11.8 / 18.6	18.6 / T 22.8	T 22.8 / T 32.9	L 27.4 / R 36.2	R 36.2 / 45.0	45.0 / 49.7	49.7 / 65.9
Length (MI/)	4.3 MI	2.6 MI	2.3 MI	2.6 MI	6.8 MI	4.2 MI	10.1 MI	8.8 MI	8.8 MI	4.7 MI	16.2 MI
Rural or Urban	URBAN	URBAN	URBAN	URBAN	RURAL	RURAL	RURAL	RURAL	RURAL	RURAL	RURAL
Terrain	FLAT	FLAT	FLAT	FLAT	ROLLING	ROLLING	MTNS	MOUNTAINOUS	MOUNTAINOUS	MOUNTAINOUS	MOUNTAINOUS
ROW: Range Existing (FT)	220.0 / 220.0 FT	246.0 / 246.0 FT	250.0 / 250.0 FT	250.0 / 250.0 FT	60.0 / 100.0 FT	60.0 / 110.0 FT	60.0 / 100.0 FT	130.0 / 500.0 FT	40.0 / 120.0 FT	45.0 / 200.0 FT	80.0 / 200.0 FT
Median Range (FT)	40.0 / 40.0 FT	39.0 / 39.0 FT	39.0 / 39.0 FT	59.0 / 88.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT	0.0 / 0.0 FT
Shoulder Range (FT)	10.0 / 10.0 FT	10.0 / 10.0 FT	10.0 / 10.0 FT	10.0 / 10.0 FT	2.0 / 8.0 FT	2.0 / 10.0 FT	2.0 / 8.0 FT	6.0 / 8.0 FT	2.0 / 8.0 FT	2.0 / 2.0 FT	1.0 / 1.0 FT
Lane Width (FT)	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT	12.0 FT
Ultimate ROW (FT)	* FT	* FT	* FT	* FT	170 FT	170 FT	170 FT	* FT	* FT	* FT	* FT
Facility: Existing	6F	6F	4F	4F/4E	2C	2C	2C	4E	2C	2C	2C
2030 Concept	8F***	6F	4F	4F/4E	4E****	4E****	4E****	4E****	2C(I)**	2C(I)**	2C(I)**
UTC	8F	8F	8F	4F	4E	4E	4E	4E	2C(I)**	2C(I)**	2C(I)**
LOS: 2005	C	B	B	B	D	C	C	B	D	C	C
LOS: 2015	D	B	B	B	D	D	C	B	D	D	C
LOS: 2030	F	C	C	B	E	D	C	B	D	D	C
LOS: 2030 Concept	D	D	D	D	D	D	D	D	D	D	D
Deficiency/Year Deficient	2030	N/A	N/A	N/A	2030	N/A	N/A	N/A	N/A	N/A	N/A
Project in STIP/RTP (Y/N)	NO	NO	NO	NO	YES	YES	YES	NO	YES	YES	NO
LOS W/ Concept Improvement	D^	N/A	N/A	N/A	B^	B^	B^	N/A	N/A	N/A	N/A
Directional Split (Peak Hour)	51/49	51/49	52/48	52/48	55/45	55/45	52/48	52/48	53/47	52/48	52/48
AADT: 2005	65,000	39,500	22 300	6,600	7,100	4,800	3,200	9,700	7,000	4,400	1,850
AADT: 2015	84,500	51,400	31,200	10,600	8,870	6,000	4,000	13,580	8,190	5,720	2,400
AADT: 2030	117,000	71,100	44,600	16,500	11,780	7,960	5,120	20,370	9,800	8,140	3,420
Peak Hour: 2005	7,500	4,600	2,800	730	850	570	380	1,160	840	530	220
Peak Hour: 2015	9,750	5,980	3,920	1,170	1,060	720	480	1,630	980	680	290
Peak Hour: 2030	13,500	8,280	5,600	1,830	1,410	950	610	2,440	1,170	970	410
% Trucks: AADT	2 %	4 %	5 %	4 %	7 %	7 %	7 %	7 %	7 %	7 %	7 %
% Trucks: Peak Hour	1 %	2 %	2 %	3 %	1 %	1 %	4 %	2 %	2 %	2 %	3 %

LEGEND

[illegible]

VII. A Review of Route 168 Performance: Current and Future

The Route Concept LOS for the entire route is LOS D. As of 2005, Route 168 is operating at LOS D or better for most of its entirety. The segments within the Fresno-Clovis Metropolitan Area (FCMA) are operating at mostly LOS B except at the Route 180/168 interchange.

The recently constructed Route 168 S freeway on the adopted new alignment (the Shaw Avenue-Clovis Avenue-Tollhouse Road route was the old alignment) has reduced the amount of traffic on city streets in the northeast portion of the FCMA. This portion of the route is now recognized as Route 168 S (Supplemental).

In the FCMA, public mobility has been improved with the completion of the 12-mile Sierra Freeway. However, the demands on the urban transportation network will continue to grow with increased population growth and urban development. The traffic is increasing in a dynamic manner, and the need for capacity enhancement will increase accordingly.

Segment 1 Deficiencies:

1) From the Route 180 interchange to McKinley Avenue:

This portion of Segment 1 is projected to be deficient by 2030 unless an operational improvement is made in the future. By the year 2030, the LOS for Segment 1 (from Route 180 interchange to Shaw Ave) will degrade to LOS "F" due to increased commuter and recreational travel growth.

The traffic congestion and/or weaving within the Route 180/168 interchange affects the LOS, especially during peak commute travel times. This operational condition will worsen with time as urban commute traffic increases along this corridor, especially with the completion of the Route 180 East Freeway project in late 2005.

This portion of Segment 1 is also projected to be deficient by 2030 as a result of population growth in northeast Fresno and Clovis.

This deficiency can be remedied by widening the two connector ramps from two lanes to three lanes in each direction. The additional lanes will be in the form of braided ramp connections. Metering is an option that can be employed but metering will not significantly improve the LOS in this situation because demand exceeds the maximum flow rate. However demand on the freeway can be controlled so that the flow rate is near the range of LOS E/F.

2) From McKinley Avenue to Shaw Avenue:

A major future deficiency in the Route 168 system is projected to exist by 2030 for the portion of Segment 1 from McKinley Avenue to Shaw Avenue. This deficiency will occur as a result of increased travel demand and a lack of adequate capacity. This situation can be remedied by widening the facility to an 8-lane freeway. Adequate median width exists to add mixed-flow lanes or light rail (mass transit) in the future but funding may be a constraint.

Because they are not part of the Interregional Road System (IRRS), the urban segments of Route 168 are not eligible for the full range of Interregional Transportation Improvement Program (ITIP) funding. However, these segments are eligible to compete for the Regional Transportation Improvement Program (RTIP) funding. Any future improvements on these segments will be contingent on the local and regional agencies working cooperatively with Caltrans to secure funding.

Caltrans will continue to employ ITS improvements such as changeable message signs, highway advisory radio, and possibly additional ramp metering to improve efficiency and traveler safety along this route. This will be in addition to the regular maintenance and periodic operations and safety improvements through the State Highway Operations Protection Program (SHOPP).

Improvement projects that do not add capacity to the route, including auxiliary lanes, can also be funded through the SHOPP program. A combination of these and other

strategies will be needed to more effectively sustain an acceptable LOS for the entire route.

Numerous roadway improvements such as additional ramp lanes and traffic signals have also been identified through the Caltrans Intergovernmental Review (IGR) process. These occur as a result of local development impact on the State highway. These suggested improvements have been conveyed to the Cities of Fresno and Clovis as well as Fresno County. Future interchanges at Nees Avenue and Shepherd Avenue have also been identified as a means to improve this highway's LOS. Both of these potential future interchanges are within the Clovis Sphere of Influence.

For the rural segments of Route 168 (Shepherd Avenue to Huntington Lake), a different methodology has been used in forecasting future traffic volumes. Since the upper portion of Route 168 corridor is a recreational area with extensive planned mountain urban development in the Shaver vicinity, travel patterns considering recreational travel are not well represented by a regional traffic model set up to model conventional urban and suburban commute travel. To account for these unique travel characteristics, the historical growth method was applied in forecasting future traffic volumes. The deficiency analysis reflected that the segment from Shepherd Avenue to Sample Road (Segment 5) will become deficient due to lack of capacity (LOS E). The rest of the rural segments (Segments 6 -11) will have adequate travel capacity (LOS D) for the 2030-planning horizon.

The 2030 route concept is to build a 4-lane expressway on a 4-lane right-of-way from Shepherd Avenue to the Auberry/Tollhouse Road Junction. About two-thirds of the right-of-way that will be needed for the new alignment between Millerton Road and Lodge Road has been acquired by Caltrans based on engineering work done in the 1960's.

However, the exact alignment is still tentative and not yet finalized. Also, the issue of how this project will be funded, i.e. whether Measure C extension money will be available

for this project (the 4-lane expressway) needs to be addressed.

The 2030 route concept for the rest of the route from Auberry/Tollhouse Junction to the end of the route will remain a 2-lane conventional highway with improvements added as needed.

The deficiency analysis does not justify building a 4-lane expressway within the 2030-planning horizon. New specific recommendations for Route 168 in the rural area are:

1. Fresno County should investigate the feasibility of continuing an expressway on the new alignment from Shepherd Avenue to Lodge Road. This would likely entail a new route adoption study through a Project Study Report.
2. Fresno County should continue to seek right of way dedication for a parallel County road to serve the mountain residential subdivisions of the Shaver Lake area. This would also relieve traffic off of existing Route 168.
3. At a later date, the County and Caltrans could also pursue a new route adoption study for an expressway from the Auberry/Tollhouse Junction to Shaver Lake. The segment from Shaver Lake to Huntington Lake will not likely require expressway expansion.

Fresno County wants the Federal Highway Administration (FHWA) to designate Route 168 from downtown Clovis to Kaiser Pass as a Federal Scenic Byway. Becoming a national scenic byway will make Route 168 eligible for federal grants to put up signs and build interpretive displays and turnouts for lookout points. The County plans to work with other community groups to develop a corridor-management plan for promotion of the route. The Forest Service has designated this route as the Sierra Heritage National Scenic Byway.

See the following page for Section VIII - Planned and Programmed Improvements to Route 168.

VIII. Planned and Programmed Improvements to Route 168

The following table shows both the planned and programmed projects for Route 168 over the next 25 years. The projects shown are capacity-increasing (STIP) projects.

The table shows:

1. The specific segment.
2. Route 168 Planned Projects - the listing document (RTP, ITSP or STIP Candidate), description of the project, and projected completion date(s).
3. Route 168 Programmed Projects - the listing document (STIP), description of the project, and projected begin and complete construction dates.
4. Only Route 168 segments that have either planned and/or programmed projects.

Project scope and technical data are for general informational purposes only. If current information is needed, please verify with the Caltrans District 6 Office of Advance Planning at (559) 445-5232.		
Segment PM From/To	SR 168 Planned Projects	SR 168 Programmed Projects
5 FRESNO PM R11.8-18.6 Shepherd Ave To Sample Rd	RTP: FRE 168 PM R11.8 – T22.8, From Shepherd Ave to Lodge Road: Construct 2-lane expressway on 4-lane freeway ROW on a new alignment (Future).	There are no projects currently programmed for this segment
6 FRESNO PM 18.6-T22.8 Sample Rd to Millerton Rd	RTP: FRE 168 PM R11.8 – T22.8, From Shepherd Ave to Lodge Road: Construct 2-lane expressway on 4-lane freeway ROW on a new alignment (Future).	There are no projects currently programmed for this segment
7 FRESNO PM T22.8 – T31.2 Millerton Rd to Lodge Rd	RTP: FRE 168 PM T22.8 – T27.4, From Shepherd Ave to Lodge Road: Construct 2-lane expressway on 4-lane freeway ROW on a new alignment (Future).	There are no projects currently programmed for this segment

Please see the Appendix for this report's Glossary and References, and additional information on Adopted Routes, Freeway Agreements and Transit and Bicycle information.





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References	A-1
Glossary	A-2 - A-8
ITS	A-9 - A-10
Freeway Agreements	A-11
Adopted Route Maps	A-12
Transit Services & Bicycle Facilities	A-13 - A-14

References

TCR SR 168

Local Jurisdictions – MPOs:

Council of Fresno County Governments (COFCG)
2100 Tulare Street, Suite 619
Fresno, CA 93721
(559) 233-4148

Air Quality District:
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726
(559) 230-6000

Air Basin: San Joaquin Valley

Air Basin Determination:
Severe non-attainment for ozone and serious For PM¹⁰. Contact the Air District for more information.

Transit Services:

Fresno Area Express (FAX)
2223 "G" Street
Fresno, CA 93706
(559) 621-7433

Traffic Accident Data:

Caltrans District 6
Office of Traffic Investigations
(559) 488-4123

Fresno County Rural Transit Agency (FCRTA)
2100 Tulare Street, Suite 619
Fresno, CA 93721
(559) 233-6789

Clovis Stageline
1033 5th Street
Clovis, Ca 93612
(559) 324-2000

Sources of Information - All Segments:

Traffic Congestion Relief Program, 2000
State Transportation Improvement Program (STIP),
2000, 2002, 2004
State Highway Operations and Protection Program
(SHOPP), 2000, 2002, 2004

Interregional Improvement Track-Interregional
Road System Plan (ITSP), 1998, 2000
Caltrans District 6 Bicycle Inventory, 2003
Office of System Planning (559) 444-2500

Sources of Information - By County:

Fresno County:
Fresno County General Plan, 2000
Fresno County Regional Transportation Plan, 2004

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AADT: (Average Annual Daily Traffic). This designation indicates the total daily traffic that is counted at a particular location or within a particular highway segment and then averaged out over one calendar year.

Access Control (or Controlled Access): The condition where the ability to access a state highway by owners or occupants of abutting land is fully or partially controlled by public authority. Also, see Classification of Roads.

Bicycle Facilities: Bicycle facilities within the state are classified into four categories:

- **Class 1 Bikeways (Bike Paths):** Bike Paths are separate *off-highway* facilities for the exclusive use of bicyclists and with cross flow by motor vehicles minimized.
- **Class 2 Bikeways (Bike Lanes):** Bike Lanes are for preferential use by bicyclists and can be established within the paved area of state highways. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike lanes are separated from traffic lanes on California highways by the use of a painted 6" stripe on the pavement and are designated as bike lanes by the use of white R81 (Bike Lane), R-81A (Begin) and R81-B (End) "regulatory" signs. (MUTCD Chapter 9 - California Supplement - 2004).
- **Class 3 Bikeways (Bike Routes):** Bike Route are shared facilities which serve either to (a) provide continuity to other bike facilities (usually a Class 1 or Class 2 bikeway); or (b) to designate a preferred route through a high demand corridor. Such facilities are approved by, and subsequently maintained by, local jurisdictions and/or Caltrans. Bike Routes are not separated from traffic lanes but are designated as bike routes through the use of green D11-1 (Bike Route), M4-11 (Begin) and M4-12 (End) "guide" signs. (MUTCD - Chapter 9 - 2003).
- **Shared Roadway (No Bikeway Designation):** Most bicycle travel on conventional state highways and local streets occurs on facilities without any bikeway designations, signs or striping. Virtually all highways in use by bicyclists for inter-city and recreational travel fall under this "share-the-road" scenario.

CMS: (Changeable Message Sign). A CMS is a full-matrix display sign used on State highways to provide motorists with an advanced warning of major highway incidents and route diversion information. CMSs are capable of displaying a variety of character heights and up to three lines of text. CMSs play increasingly important roles on State highways by improving operations and safety.

Classification of Roads:

- **Conventional (C):** A highway without access control, which may or may not be divided. Grade separations at intersections or access control may be used when justified at spot locations. Example: 2C = 2 lane conventional highway.
- **Expressway (E):** An arterial highway with at least partial control of access, which may or may not be divided or have grade separations at intersections. Example: 4E = 4 lane expressway (note: 2 lane expressways are not common).
- **Freeway (F):** A highway to which the owners of abutting lands have no right or easement of access to or from their abutting lands. Access is controlled or restricted to interchanges and with grade separation at all intersections. Example: 6F = 6 lane freeway.
- **Functional Classification:** Guided by Federal legislation, functional classification refers to a process by which streets and highways are grouped into classes or systems, according to the character of the service that is provided, e.g., Principal Arterial, Minor Arterial, Collector, Local, etc.

Contract Phasing:

- **Begin Construction:** This is the phase when the contract for construction is approved and construction begins.
- **Complete Construction:** This is the phase when the completion of the construction contract occurs.

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COG: See RTPA

CTC: (California Transportation Commission). The California Transportation Commission (CTC) was established in 1978 by Assembly Bill 402 (Chapter 1106, Statutes of 1977) out of a growing concern for a single, unified California transportation policy. The Commission is responsible for the programming and allocating of funds for the construction of highway, passenger rail and transit improvements throughout California. The Commission also advises and assists the Secretary of Business, Transportation and Housing Agency and the Legislature in formulating and evaluating state policies and plans for California's transportation programs. The Commission is also an active participant in the initiation and development of State and Federal legislation that seeks to secure financial stability for the State's transportation needs.

Density: The number of vehicles occupying a given length of lane or roadway averaged over time, usually expressed as vehicles per mile or vehicles per mile per lane. Also see **V/C**.

Facility:

- **Concept Facility:** A highway facility type and characteristic considered viable without improvement within the 25 year planning period given financial, environmental, planning and engineering factors.
- **Present Facility:** Highway type and general characteristics in place at the time of the development of a TCR.

FTIP: See Project Programming

ICES: (Intermodal Corridor of Economic Significance). Significant National Highway System Corridors that link intermodal facilities most directly, conveniently and efficiently to intrastate, interstate, and international markets.

ITMS: (Intermodal Transportation Management System). A performance-based decision support system operating on a personal computer which allows "alternatives analysis" through the use of performance measures. ITMS incorporates intermodal system elements for freight and person movements using a spatial and attribute database thereby allowing management of transportation systems under existing and forecasted conditions. ITMS provides a new intermodal-planning tool using a common statewide data set for state and local transportation planners.

ITS: (Intelligent Transportation Systems). ITS refers to a wide variety of tools and techniques that focus on addressing transportation problems by improving the efficiency and safety of the existing transportation infrastructure. ITS works through the integration of high tech computing and information sharing.

ITSP: (Interregional Transportation Strategic Plan). The ITSP is a single document prepared by Caltrans to consolidate and communicate key elements of its ongoing long and short range planning. The ITSP serves as a counterpart to the Regional Transportation Plans (RTPs) prepared by the 43 Regional Transportation Planning Agencies (RTPAs) in California.

KP: (Kilo Post) See Post Mile

Lifeline Routes: See Route Designations

LOS: (Level of Service). Level of Service describes operating conditions a typical driver will experience on a typical day while driving on a particular facility. Like a report card, the LOS is defined in categories ranging from A-F. "A" represents the best traffic flow (low v/c ratio and delay, no impediments) through "F" representing the worse congestion (extremely high v/c ratio and delay, gridlock conditions).

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MIS: (Major Investment Study). When the need for a major metropolitan transportation investment is identified and Federal funds are potentially involved, a major investment (corridor or sub-area) study is undertaken to develop or refine the plan. Upon completion, the MIS aids the area's Metropolitan Planning Organization (MPO), in cooperation with any participating agencies, on the design concept and scope of the investment.

MPO: See RTPA

Multi-Modal: Pertaining to the use of more than one mode of travel such as private vehicles, taxis, bicycles, mass-transit, para-transit, light and heavy rail, ferries, airplanes etc.

NHS: See Route Designation

NTN: See Route Designation

Non-attainment (pertaining to air quality): Identifies non-attainment status for CO (carbon monoxide), Ozone, and PM (particulate matter) within the subject air basin.

Overcrossing: (O/C) See Structures, Types of

PM: (MilePost Marker, Postmile or KP (Kilo Post). An 8" x 48" metal post marker along a State highway indicating a location using the postmile or designation. This is the distance in miles (or kilometers, in the case of Kilo Post measurements) that the given location is from the county line measuring from the south to the north or from the west to the east. Postmiles ascend in the northerly and easterly directions as determined by the route. The PM marker also includes an abbreviation for the County wherein its located (i.e., in Caltrans District 6: FRE = Fresno, KER = Kern, KIN = Kings, TUL = Tulare, MAD = Madera). As such, a PM marker located along SR 99 and displaying "MAD" and "6.25" would indicate that you are currently located in Madera County at a point 6.25 miles north of the Fresno/Madera County Line.

PROJECT PROGRAMMING: Separate programming documents prepared and adopted for somewhat different purposes, are required under State and Federal law. Transportation programming is the public decision making process that sets priorities and funds projects envisioned in long range transportation plans. It commits expected revenues over a multi-year period to transportation projects. Programming schedules high priority capital outlay projects for development and implementation. Programming documents include Federal, State, Regional and Metropolitan Transportation Plans, e.g., FTIP, ITIP, RTIP, SHOPP, STIP.

- **FTIP:** (Federal Transportation Improvement Program). To apply for federal highway funding a Federal statute requires MPOs to complete a Transportation Improvement Program. The MPO prepares the FTIP in cooperation with its member agencies (cities), its transit operators, State and Federal agencies, and with public involvement. The FTIP must by law be financially constrained and include a financial plan that demonstrates how projects can be implemented while the existing transportation system is being adequately operated and maintained. The FTIPs are in actuality a listing of planned Federally funded capital improvements to the regions' transit systems along with associated Federal operating assistance program and Federal Statewide Transportation Improvement Program (FSTIP).
- **ITIP:** (Interregional Transportation Improvement Program). The ITIP is Caltrans' equivalent to the RTIP (Regional Transportation Improvement Program) and consists of STIP projects funded from the Interregional Program share, which is 25% of new STIP funding. Caltrans' ITIP may nominate projects to the STIP only for the Interregional Program. The ITIP should be based on a Strategic Plan for implementing the Interregional Program. The ITIP should describe how proposed projects relate to the Strategic Plan and how the Strategic Plan would implement the California Transportation Commission's objectives. The ITIP includes both State highway and rail projects (potentially including mass transit guideway and grade separation projects).

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- **PSR:** (Project Study Report). A pre-programming document required for project inclusion in the STIP.
- **PSSR:** (Project Scope Summary Report). An engineering report used to select candidate projects to be programmed in the State Highway Operation Protection Program (SHOPP). SHOPP funds are used primarily for rehabilitation, resurfacing and safety projects on State highways.
- **RTIP:** (Regional Transportation Improvement Program). After consulting with Caltrans, each Regional Transportation Planning Agency (RTPA) and/or County Transportation Commission (CTC) must prepare and submit an RTIP for regions with urbanized areas. Some urbanized RTPAs coincide with the Federal Metropolitan Planning Organizations (MPOs). Each regional agency is required to adopt and submit its RTIP to the CTC and to Caltrans. The CTC will utilize the RTIP to consider projects to be included in the State Transportation Improvement Program (STIP). The funds are available for a broad array of transportation improvement projects, including improving State highways, local roads, public transit, inter-city rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwalls, etc.
- **SHOPP:** (State Highway Operation Protection Program). The SHOPP is a four-year program limited to projects related to State highway safety and rehabilitation. SHOPP funds are for major transportation capital improvements that are necessary to preserve and protect the State highway system. The SHOPP does not include projects that increase capacity. Most of the projects are for pavement rehabilitation, bridge rehabilitation, and traffic safety improvements. Other projects may include such things as operational improvements (e.g., traffic signalization) and roadside rest areas. Caltrans alone has full control of SHOPP funds.
- **STIP:** (State Transportation Improvement Program). Under California law, the STIP and SHOPP (State Highway Operations Protection Program) are the two primary documents through which the CTC commits and allocates funds to particular projects. In the year 2000 and thereafter, the STIP will be a four year plan with updates every two years. The STIP is a capital improvement program of transportation projects funded with revenues from the State Highway Account and other sources on and off the State highway system. The STIP includes a list of transportation projects, proposed in two broad programs, the regional program funded with 75% of new STIP funding and the interregional program funded from 25%. The STIP has two main funding components: the RIP (Regional Improvement Program), prepared by RTPAs and the IIP (Interregional Improvement Program) prepared by Caltrans.

ROW: (Right-of-Way). Denotes the *total* width allocated for a highway, including shoulders and adjacent land.

RCR: See TCR

Route: The California Legislature establishes the framework for the State Highway System by describing each state roadway in the Streets and Highway Code. This description establishes the official beginning and ending points of a state highway and in some cases intermediate control points.

Route Adoptions: Route Adoptions are needed for the following reasons: (1) any new alignment of an existing legislative route, (2) to establish the location of an unconstructed route, (3) to allow for the conversion of any conventional highway to a freeway or other form of controlled access route, (4) designating a traversable highway and (5) for any temporary alignments along an established state route. Route adoptions are approved by the CTC prior to submission to the FHWA for final approval.

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Route Designations: Identifies whether or not the subject segment of a route is designated as being part of a system. Examples of systems include Freeway/Expressway System, Highways of Regional Significance, Interregional Highway System (IRRS), National Highway System (NHS), National Truck Network (NTN), and Terminal Access Route for the National Truck Network, Scenic Highway, or Strategic Highway Network (STRAHNET).

- **Freeway/Expressway System:** The Statewide system of highways declared by the Legislature to be essential to the future development of California. The F&E System has been constructed with a large investment of funds for the ability of control access, in order to ensure the safety and operational integrity of the highways.
- **IRRS:** (Interregional Road System) Caltrans developed an Interregional Road System Plan that identified projects which will provide the most adequate interregional road system to all economic centers in the State. IRRS is a series of Interregional State highway routes, outside the urbanized areas, that provide access to, and links between, the State's economic centers, major recreational areas, and urban and rural regions. Due to the high number of routes and capacity improvements needed on the IRRS, the most critical IRRS routes were identified as *High Emphasis Routes*. High Emphasis Routes are a priority for programming and construction and are critically important to interregional travel and the State as a whole. *Focus Routes* are a subset of the High Emphasis Routes. These routes represent 10 IRRS corridors that should be of the highest priority for completion to minimum facility standard in the 20 year period.
- **Lifeline Routes:** (Earthquake Emergency Response) A Lifeline Route is a route on the State highway system that is deemed so critical to emergency response/life-saving activities of a region or the state that it must remain open immediately following a major earthquake, or for which pre-planning for detour and/or expeditious repair and reopening can guarantee through-movement. The focus is on highly critical routes that allow for the immediate movement of emergency equipment and supplies into a region or through a region.
- **NHS:** (National Highway System) The purpose of the NHS is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities and other intermodal transportation facilities. Additionally, such highways meet National defense requirements and serve to facilitate interstate and interregional travel. The NHS consists of 155,000 miles, (plus or minus 15 percent), of the major roads in the U.S. Included in the NHS are all interstate routes, a large percentage of urban and rural principal arterial, the defense strategic highway network, and strategic highway connectors.
- **NTN:** (National Truck Network) A list of truck route segments and their truck access designations (such as National Network (NN), Terminal Access, California Legal, Advisory, or Restricted) with each segment's beginning and ending post miles, and beginning and ending cross streets.
- **Regionally Significant:** A transportation corridor that serves regional transportation needs and would normally be included in the modeling of a metropolitan area's transportation network. Such corridors, at minimum, would include all principal arterial highways and all fixed guideway transit facilities located within the region.
- **Scenic Highway:** A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These highways are identified in Section 263 of the Streets and Highways Code. For a highway to be considered *Officially Designated* the local jurisdiction is required to develop and adopt protection measures in the form of ordinances to apply to the area of land within the scenic corridor. Additions and deletions to the list of highways eligible for scenic designation can only be made through legislative action.

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- **STAA Truck:** In 1982, the Federal government passed the Surface Transportation Assistance Act (STAA). This act requires states to allow certain longer trucks on a network of Federal highways, referred to as the National Network (NN). A STAA truck is, in many cases, longer than a “California legal” truck, and may operate only on specific highways in California.
- **STRAHNET:** (Strategic Highway Corridor Network) STRAHNET is a National system of public highways that are key elements in U.S. strategic policy. This network provides defense access, continuity, and emergency capabilities for movements of personnel and equipment during both peace time and war. STRAHNET is comprised of about 61,000 miles of highway, including the 45,400-mile system of Interstate and Defense Highways and 15,600 miles of other important public highways. STRAHNET “connectors” (about 1,700 miles) are additional highway routes linking over 200 important military installations and ports to the STRAHNET. Generally, these “connector” routes end at the port boundary or installation gate and are typically used only when moving personnel and equipment during a mobilization or deployment
- **Terminal Access Route:** Terminal Access (TA) routes are portions of State or local highways that Caltrans or a local government granted access to STAA trucks. The purpose of TA routes is to allow STAA trucks (1) to travel between NN routes, (2) to reach a truck’s operating facility, or (3) to reach a facility where freight originates, terminates, or is handled in the transportation process.

Route Numbering: South-north state and interstate routes normally carry odd number designations (e.g. I-5, SR 43, SR 99 etc.) while west-east routes normally carry even number designations (e.g. I-10, SR 58, SR 168 etc.).

RTIP: See Project Programming

RTP: (Regional Transportation Plan) The RTP is a comprehensive 20 year plan for the region, updated every four years by the regional transportation planning agency (RTPA). The RTP includes goals, objectives, and policies and recommends specific transportation improvements.

RTPA: (Regional Transportation Planning Agency) The RTPA is an association of city and county governments created to address regional transportation issues while protecting the integrity and autonomy of each jurisdiction. The RTPA serves as the forum for cooperative decision making by principal elected officials of general local government and is responsible for the preparation and adoption of a Regional Transportation Improvement Program (RTIP). There are 43 RTPAs in California. In smaller counties, usually the County Transportation Commission; in urban counties, usually the Metropolitan Planning Organization (MPO) is the RTPA. RTPAs produce the RTIPs for the approval of the California Transportation Commission (CTC).

- **MPOs and COGs:** RTPAs can be an MPO (Metropolitan Planning Organization) or a COG (Council of Governments) or all three. Some COGs also serve as MPOs, under Federal transportation rules, and this designation carries considerable power in allocating Federal and State funds for transportation projects. For example, Fresno COG is the MPO for Fresno County.

According to U.S. Code, an MPO is the organization designated by the governor and local elected officials as responsible, together with the State, for preparing a comprehensive transportation plan for both highway and transit modes, with long range (10 – 20 years) and shorter range (five year) elements in an urbanized area (population 50,000 or greater). The major role of the MPO is to foster inter-governmental communications and cooperation, undertake comprehensive regional planning with an emphasis on transportation, provide for citizen involvement in the planning process and provide technical services to the member agencies. MPOs are created by elected officials of counties and their incorporated cities as a means of providing a cooperative body for the discussion and resolution of issues that go beyond their individual boundaries.

Glossary Transportation Concept Report

State and Federal laws encourage such efforts. In each of these areas, MPOs act as a consensus-builder to develop an acceptable approach on how to handle problems that do not recognize jurisdictional boundaries.

R/U: (Rural *or* Urban location) Areas designated as rural are those lying outside the U.S. Census urban area boundary with a population less than 2,500 (less than 5,000 population for Federal Aid highway purposes). Areas designated as urban are those lying inside the U.S. Census urbanized boundary.

Scenic Highway: See Route Designation

Separation: See Structures, Types of

SHOPP: See Project Programming

SR: (State Route) Highways within the State which are distinctively designed to serve intrastate and interstate travel.

STAA: See Route Designation

STIP: See Project Programming

STRAHNET: See Route Designation

STRUCTURES, Types of

- **Overcrossing:** (O/C) A configuration where the State highway crosses below the grade of a local road.
- **Separation:** (Sep) A configuration where a State highway crosses over a State highway.
- **Undercrossing:** (U/C) A configuration where a State highway crosses above the grade of a local road.
- **Underpass:** A configuration where the State highway crosses below the grade of a railroad line.

TCR: (Transportation Concept Report) Formerly called a Route Concept Report or RCR, this document analyzes a transportation corridor service area, establishes a 20 year transportation planning concept, and identifies modal transportation options and applications needed to achieve the 20 year concepts.

TCRP: (Traffic Congestion Relief Program) The TCRP was enacted as part of AB 2928 (2000). Through the TCRP, the Governor and Legislature allocated \$4.9 billion for projects to relieve congestion, provide safe and efficient movement of goods, improve intermodal connectivity, and make further investments in transit and rail facilities within the State.

Undercrossing: See Structures, Types of

Underpass: See Structures, Types of

UTC: (Ultimate Transportation Corridor) Highest predictable build-out beyond 20 years.

V/C: (Volume/Capacity ratio) A ratio of demand flow rate (volume) to capacity for a traffic facility. Also see Density.



Intelligent Transportation Systems SR 168

Traffic Monitoring Stations *Status March 2005*

Proposed

Element Type	County	Route	Post Mile	Location	Status
D6TMS	FRE	168	0	AT SIERRA AVE	Proposed
D6TMS	FRE	168	0.44	N OF FLORADORA AVE	Proposed
D6TMS	FRE	168	1.18	N OF CLINTON AVE	Proposed
D6TMS	FRE	168	2.17	S OF DAKOTA AVE	Proposed
D6TMS	FRE	168	3.28	S OF GETTYSBURG AVE	Proposed
D6TMS	FRE	168	4.57	AT BARSTOW AVE	Proposed
D6TMS	FRE	168	5.32	W OF BULLARD AVE	Proposed
D6TMS	FRE	168	5.5	W OF WILLOW AVE OC	Proposed
D6TMS	FRE	168	5.8	E OF WILLOW AVE OC	Proposed
D6TMS	FRE	168	7.22	AT SUNNYSIDE	Proposed
D6TMS	FRE	168	8.29	AT ARMSTRONG AVE	Proposed
D6TMS	FRE	168	9.35	AT LOCAN AVE	Proposed

Closed Circuit Television Locations *Status March 2005*

Existing

Element Type	County	Route	Post Mile	Location	Status
CCTV	FRE	168	0.43	AT FLORADORA AVE	Existing
CCTV	FRE	168	1.74	AT SHIELDS AVE	Existing
CCTV	FRE	168	2.78	AT ASHLAN AVE	Existing
CCTV	FRE	168	4.03	AT SHAW AVE	Existing
CCTV	FRE	168	5.33	AT BULLARD AVE	Existing
CCTV	FRE	168	6.61	HERNDON AVE	Existing

Proposed

Element Type	County	Route	Post Mile	Location	Status
CCTV	FRE	168	7.74	FOWLER AVE	Proposed
CCTV	FRE	168	8.91	TEMPERANCE AVE	Proposed

* If current information is needed, please verify with the Caltrans District 6 Traffic Management Center at (559) 445-6848.

Changeable Message Signs

Status March 2005

Existing

Element Type	County	Route	Post Mile	Location	Status
CMS	FRE	168	1.29	AT HARVARD AVE	Existing
CMS	FRE	168	9	E OF GETTYSBURG AVE	Existing
CMS	FRE	168	11	WB AT SIERRA	Existing
CMS	FRE	168	16.1	AT ACADEMY AVE	Existing

Proposed

Element Type	County	Route	Post Mile	Location	Status
CMS	FRE	168	1.01	E OF MC KINLEY AVE	Proposed
CMS	FRE	168	5	E OF ASHLAN AVE	Proposed
CMS	FRE	168	12	HERNDON AVE	Proposed

Highway Advisory Radios

Status March 2005

Existing

Element Type	County	Route	Post Mile	Location	Status
RPU	FRE	168	27.36	AT LODGE RD	Existing

Proposed

Element Type	County	Route	Post Mile	Location	Status
RPU	FRE	168	45.1	SHAVER LAKE MTCE STA	Proposed

Weather Stations

Status March 2005

Existing

Element Type	County	Route	Post Mile	Location	Status
RPU	FRE	168	27.36	AT LODGE RD	Existing

Proposed

Element Type	County	Route	Post Mile	Location	Status
RPU	FRE	168	45.1	SHAVER LAKE MTCE STA	Proposed

* If current information is needed, please verify with the Caltrans District 6 Traffic Management Center at (559) 445-6848.

FREEWAY/CONTROLLED ACCESS HIGHWAY AGREEMENTS ROUTE 168

COUNTY	POST-MILE BACK	POST-MILE AHEAD	DESCRIPTION	JURISDICTION	DATE APPROVED	EXISTING AGREEMENTS
FRESNO	0.40	R4.50	Between Floradora Avenue and Shaw Avenue	City of Fresno	Jun-68	FREEWAY AGREEMENT
FRESNO	R4.50	R9.30	Between Willow Avenue and 0.4 mile East of Temperance Avenue	City of Clovis	Feb-94	FREEWAY AGREEMENT
FRESNO	9.30	12.20	Enterprise Canal to 0.9 km East of Shepherd Avenue	Fresno County	May-98	CONTROLLED ACCESS HWY AGREEMENT
FRESNO	20.30	27.10	Between 1 mile West of Millerton Road and Lodge Road	Fresno County	Mar-66	FREEWAY AGREEMENT
FRESNO	27.10	36.20	Between Lodge Road and 0.4 mile East of existing Route 76 (Old Route 168)	Fresno County	Feb-62	FREEWAY AGREEMENT

Note: There is a gap on freeway agreements from Postmiles 12.20 – 20.30.

ROUTE ADOPTION MAPS ROUTE 168

COUNTY	POST-MILE BACK	POST- MILE AHEAD	DESCRIPTION	JURISDICTION(S)	DATE ADOPTED	EXISTING ROUTE ADOPTION MAP
FRE	R0.00	R4.00	Between East Lewis Avenue and East Shaw Avenue	City of Fresno	12/18/63	Yes
FRE	R4.00	R9.70	Between 3 miles E. of Route 125 and 3 miles N.E. of Clovis	City of Fresno/Fresno County	8/17/55	Yes
FRE	R8.40	R46.90	Between 0.25 miles Southwest of Temperance Avenue and Junction with Big Creek Road.	City of Clovis/ Fresno County	2/26/64	Yes
FRE	R22.60	22.90	Between 1.1 mile and 0.8 mile West of Nicholas Road.	Fresno County	1/22/87	Yes
FRE	22.80	32.90	From Existing Route 168 at Millerton Road to Existing Route 168 Expressway at Lodge Road.	Fresno County	5/15/73	Yes
FRE	28.50	29.10	From 1.7 miles to 1.1 miles South of Prather	Fresno County	12/12/85	Yes
FRE	49.70	65.90	From Shaver Lake to Huntington Lake	Fresno County	10/19/55	Yes

Note: For some portions, there is an overlap of postmile limits. The latter date generally supercedes the previous portion. Please refer to respective map(s) for dates.

SR 168 Transit Services
Fresno County
October 2005

Segment PM From/To	Transit Services
1 - 6 FRESNO PM R0.00 - T22.8 ROUTE 180 to MILLERTON RD	No transit services are provided along SR 168 within these segments (However see Segment 7 below)
7 FRESNO PM T22.8 - T32.87* MILLERTON RD to LODGE RD	Auberry Transit provides demand responsive (Dial-A-Ride) transit services within the Auberry/Prather rural areas - some of which uses or traverses SR 168. Auberry Transit also provides once-a-week (Tuesday) intercity transit services between the Auberry/Prather rural areas and the Fresno/Clovis metropolitan areas. This service runs along either SR-168 or Auberry Rd. but does not make stops along the way.
8 - 11 FRESNO PM L27.26* - 65.9 LODGE RD to 0.1 MI E OF RD to FLORENCE LAKE	No transit services are provided along SR 168 within these three segments.

SR 168 Bicycle Facilities⁽¹⁾
Fresno County
October 2005

Segment PM From/To	Bicycle Facilities
1 - 2 FRESNO PM R0.00 - R6.9 ROUTE 180 to HERNDON AVE	Six-lane freeway segment - <u>closed to bicycle travel</u> . Level terrain. <i>Shoulder width 10'</i> . Numerous alternate routes available. ⁽²⁾⁽³⁾ <u>Designation</u> - No portion of these segments are listed within the 2001 Fresno County General Plan - Circulation Element as a Class I, II or III bike facility.
3 FRESNO PM 6.9 - R9.2 HERNDON AVE to TEMPERANCE AVE	Four-lane freeway segment - <u>closed to bicycle travel</u> . Level terrain. <i>Shoulder width 10'</i> . Numerous alternate routes available. ⁽²⁾⁽³⁾ <u>Designation</u> - No portion of this segment is listed within the 2001 Fresno County General Plan - Circulation Element as a Class I, II or III bike facility.
4 FRESNO PM R9.2 - R11.8 TEMPERANCE AVE to SHEPHERD AVE	Four-lane expressway segment - <u>open to bicycle travel</u> . Level terrain. <i>Shoulder width 10'</i> . Several indirect alternate routes available. ⁽²⁾⁽³⁾ <u>Designation</u> - No portion of this segment is listed within the 2001 Fresno County General Plan - Circulation Element as a Class I, II or III bike facility.

<p>5 - 7 FRESNO PM R11.8 - T32.87 * SHEPHERD AVE to LODGE RD</p>	<p>Two-lane conventional highway - <u>open to bicycle travel</u>. <i>No shoulders</i>. Rolling terrain with easy to moderate climbs. Very winding and narrow road with high traffic volume - including logging trucks. Bicycle travel not recommended without upgrades to highway. No alternate route currently available.⁽²⁾⁽³⁾ (Also see notes #1 & # 2 below)</p> <p><u>Designation</u> - All portions of these segments <u>are listed</u> within the 2001 Fresno County General Plan - Circulation Element as a "Planned" Class II bike facility.</p>
<p>8 FRESNO PM L27.36 * - R36.2 LODGE RD to AUBERRY RD/TOLLHOUSE RD</p>	<p>Four-lane expressway segment - <u>open to bicycle travel</u>. <i>Shoulder width 10'</i>. Moderate to steep terrain. No direct alternate route currently exists for this segment.⁽²⁾⁽³⁾ (Also see note #2 below)</p> <p><u>Designation</u> - This entire segment <u>is listed</u> within the 2001 Fresno County General Plan - Circulation Element as a "Planned" Class II bike facility.</p>
<p>9 - 10 FRESNO PM R36.2 - 49.7 AUBERRY RD/TOLLHOUSE RD to HUNTINGTON LAKE RD</p>	<p>Two-lane conventional highway - <u>open to bicycle travel</u>. <i>No shoulders</i>. Moderately steep terrain. Very winding and narrow road with high volume of traffic including logging trucks - bicycle travel not recommended without upgrades to highway. No alternate route available.⁽²⁾⁽³⁾ (Also see note # 2 below)</p> <p><u>Designation</u> - Both of these segments <u>are listed</u> within the 2001 Fresno County General Plan - Circulation Element as a "Planned" Class II bike facility.</p>
<p>11 FRESNO PM 49.7 - 65.9 HUNTINGTON LAKE RD to 0.1 MI E OF RD TO FLORENCE LAKE</p>	<p>Two-lane conventional highway - <u>open to bicycle travel</u>. <i>Shoulder width 0'-3'</i>. Moderately steep terrain. Moderately winding road with average volume of traffic - numerous logging trucks. No alternate route available.⁽²⁾⁽³⁾ (Also see note # 2 below)</p> <p><u>Designation</u> - This entire segment <u>is listed</u> within the 2001 Fresno County General Plan - Circulation Element as a "Planned" Class II bike facility.</p>

* Overlapping mileposts are due to SR-168's temporary alignments in and around the Prather area (i.e. PM T32.87 and PM L27.36 are at the same geographic location).

⁽¹⁾ **Deputy Directive 64 (DD-64)** - "Policy - The Department fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and products."

⁽²⁾ **Streets and Highway Code - Section 888** - "The department (i.e. Caltrans) shall not construct a state highway as a freeway that will result in the severance or destruction of an existing major route for non-motorized transportation traffic and light motorcycles, unless it provides a reasonable, safe, and convenient alternate route, or unless such a route already exists."

⁽³⁾ **California Vehicle Code - Section 21960 (Bikes & Pedestrians on Freeways)** (a) The Department of Transportation and local authorities [i.e. acting together - not separately], [may] by order, ordinance, or resolution, with respect to freeways, expressways ... prohibit or restrict the use of the freeways, expressways, or any portion thereof by pedestrians, bicycles or other non-motorized traffic...

Note #1 - From the junction of Auberry Rd. to the Lodge Rd./SR-168 junction east of Prather (i.e. the beginning of "the 4-lane") (PM R30.13 - PM T32.87*) SR-168 is comprised of a narrow, winding, two lane road. Caltrans frequently receives complaints about this section of highway from local bicycle riders due to the roadway's lack of bikeable shoulders, its currently winding alignment and high traffic volume. Further, no alternate route currently exists for this section of the highway. As such, this single, approximately two mile section of roadway, greatly hinders an excellent recreational bike route from the Fresno/Clovis metropolitan area to the mountainous areas in and around Huntington Lake.

Note #2 - As previously stated in this document's Executive Summary, because of this route's varying terrain and steepness (it climbs from an elevation of approximately 315 feet at SR-180 to approximately 6,975 feet at its terminus east of Huntington Lake [and then to 9,175 feet at Kaiser Pass - four miles further east via a Forest Service road]), the mountainous portions of SR-168 are highly popular with local cyclists. Therefore, anyone using SR-168, especially on the weekends, will frequently encounter individual riders, or groups of riders, traversing all portions of the highway above the community of Prather. The portion of Segment 6 from Nicholas Road to the junction of Morgan Canyon Road and Millerton Road is also heavily used by bicyclists. Moreover, each year in June or July, most of the mountainous portions of SR-168, along with a series of lower elevation Fresno County and Forest Service roadways, are used for the annual "Climb to Kaiser" event. This grueling 155 mile bicycle ride, with its 13,500 feet of climbing, is considered by many sources to be one of the toughest long distance rides in the nation.